I Claim:

1. A friction clutch mechanism for use in a friction clutch type draft gear assembly, said friction clutch mechanism comprising:

(a) a pair of outer stationary plate members, each of said pair of outer stationary plate members having an inner and an outer surface, said outer surface being engageable with a respective radially opposed portion of an inner surface of a draft gear housing member adjacent an open end of such housing member;

(b) a pair of movable plate members, each of said movable plate members having at least a predetermined portion of an outer surface thereof frictionally engageable with a respective said inner surface of said pair of outer stationary plate members for absorbing at least a first portion of heat energy generated during closure of such friction clutch type draft gear assembly;

(c) a pair of inner stationary plate members, each of said inner stationary plate members having an outer surface thereof frictionally engageable with at least a portion of a respective inner surface of said pair of movable plate members for absorbing at least a second portion of such heat energy generated during closure of such friction clutch type draft gear

assembly, an inner surface of said each of said inner stationary plate members being tapered at a first predetermined angle;

(d) a pair of wedge shoe members, each of said wedge shoe members including

(i) a tapered outer surface frictionally engageable with a respective said inner surface of said tapered stationary plate members for absorbing a third portion of heat energy generated during closure of such friction clutch type draft gear assembly,

(ii) an upper surface tapered from a point disposed inwardly from said tapered outer surface inwardly toward and at an acute angle relative to a longitudinal axis of said friction clutch mechanism, said tapered upper surface being tapered at an angle of between about 49.0° and about 50.0°, and

(iii) a bottom surface tapered from a point disposed inwardly from said tapered outer surface inwardly toward and at an acute angle relative perpendicularly to said longitudinal axis of said friction clutch mechanism; and

(e) a center wedge member, said center wedge member including a pair of correspondingly tapered surfaces frictionally engageable with an upper tapered surface of a respective one of said pair of wedge shoe members for absorbing

at least a fourth portion of such heat energy generated during closure of such friction clutch type draft gear assembly.

2. A friction clutch mechanism, as recited in claim 1, wherein said tapered upper surface of each of said wedge shoe members is tapered at an angle of about 49.5°.

3. A friction clutch mechanism, as recited in claim 1, wherein said inner surface of each of said outer stationary plate members includes a first elongated slot and a first lubricating insert member disposed within said first elongated slot to prevent detrimental sticking of said friction clutch mechanism after closure of such friction clutch type draft gear assembly and during a release cycle thereof.

4. A friction clutch mechanism, as recited in claim 3, wherein said first lubricating insert members are formed from a mixture of a pre-selected lubricating metal and at least 2% graphite.

5. A friction clutch mechanism, as recited in claim 1, wherein said outer surface of each of said tapered plates includes a second elongated slot and a second lubricating insert member disposed within said second elongated slot to prevent

detrimental sticking of said friction clutch mechanism after closure of such friction clutch type draft gear assembly and during a release cycle thereof.

6. A friction clutch mechanism, as recited in claim 5, wherein said second lubricating insert members are formed from a mixture of a pre-selected lubricating metal and at least 2% graphite.

7. A friction clutch mechanism, as recited in claim 1, wherein said outer tapered surface of each of said wedge shoe members includes a third elongated slot and a third lubricating insert member located within said third elongated slot to prevent detrimental sticking of said friction clutch mechanism after closure of such friction clutch type draft gear assembly and during a release cycle thereof.

8. A friction clutch mechanism, as recited in claim 7, wherein said third lubricating insert members are formed from a mixture of a pre-selected lubricating metal and at least 2% graphite.

9. A friction clutch mechanism, as recited in claim 1, wherein said first predetermined angle of said inner surface of said pair of inner stationary plate members is about 4.5°.

10. A friction clutch mechanism, as recited in claim 1, wherein said pair of tapered surfaces of said center wedge is tapered at an angle of about 49.5°.

11. A high capacity friction clutch type draft gear assembly for absorbing both buff and draft loads being applied to a center sill member of a railway car during make-up of a train consist and in-track operation of such train consist, said friction clutch type draft gear assembly comprising:

(a) a housing member having an end wall for closing a first end thereof, said housing member being open at a radially opposed second end thereof:

(b) a compressible cushioning means disposed within a cavity of said housing member abutting at least a portion of an inner surface of said end wall disposed at said first end of said housing member, said compressible cushioning means extending longitudinally from said first end;

(c) a friction clutch mechanism disposed at least partially within said open end of said housing member, said friction clutch mechanism including;

(i) a pair of outer stationary plate members, each of said pair of outer stationary plate members having an inner and an outer surface, said outer surface being engageable with a respective radially opposed portion of an inner surface of a draft gear housing member adjacent an open end of such housing member;

(ii) a pair of movable plate members, each of said movable plate members having at least a predetermined portion of an outer surface thereof frictionally engageable with a respective said inner surface of said pair of outer stationary plate members for absorbing at least a first portion of heat energy generated during closure of such friction clutch type draft gear assembly;

(iii) a pair of inner stationary plate members, each of said inner stationary plate members having an outer surface thereof frictionally engageable with at least a portion of a respective inner surface of said pair of movable plate members for absorbing at least a second portion of such heat energy generated during closure of such friction clutch type draft gear assembly, an inner surface of said each of said inner stationary plate members being tapered at a first predetermined angle;

(iv) a pair of wedge shoe members, each of said wedge shoe members including

(a) a tapered outer surface frictionally engageable with a respective said inner surface of said tapered stationary plate members for absorbing a third portion of heat energy generated during closure of such friction clutch type draft gear assembly,

(b) an upper surface tapered from a point disposed inwardly from said tapered outer surface inwardly toward and at an acute angle relative to a longitudinal axis of said friction clutch mechanism, said tapered upper surface being tapered at an angle of between about 49.0° and about 50.0°, and

(c) a bottom surface tapered from a point disposed inwardly from said tapered outer surface inwardly toward and at an acute angle relative perpendicularly to said longitudinal axis of said friction clutch mechanism; and

(v) a center wedge member, said center wedge member including a pair of correspondingly tapered surfaces frictionally engageable with an upper tapered surface of a respective one of said pair of wedge shoe members

for absorbing at least a fourth portion of such heat energy generated during closure of such friction clutch type draft gear assembly; and

(d) a spring seat member having at least a portion of a first surface thereof abutting the opposite end of said compressible cushioning means and a second surface for engaging predetermined portions of said friction clutch mechanism, said spring seat member being mounted to move longitudinally within said housing for respectively compressing and releasing said compressible cushioning means during application and release of a force on said draft gear assembly.

12. A high capacity friction clutch type draft gear assembly, as recited in claim 11, wherein said tapered upper surface of each of said wedge shoe members is tapered at an angle of about 49.5°.

13. A high capacity friction clutch type draft gear assembly, as recited in claim 11, wherein said compressible cushioning means includes at least a plurality of springs.

14. A high capacity friction clutch type draft gear assembly, as recited in claim 11, wherein said inner surface of each of said outer stationary plate members include a first

elongated slot and a first lubricating insert member disposed within said first elongated slot to prevent detrimental sticking of said friction clutch mechanism after closure of such friction clutch type draft gear assembly and during a release cycle thereof.

15. A high capacity friction clutch type draft gear assembly, as recited in claim 14, wherein said first lubricating insert members are formed from a mixture of a pre-selected lubricating metal and at least 2% graphite.

16. A high capacity friction clutch type draft gear assembly, as recited in claim 11, wherein said outer surface of each of said tapered plates includes a second elongated slot and a second lubricating insert member disposed within said second elongated slot to prevent detrimental sticking of said friction clutch mechanism after closure of such friction clutch type draft gear assembly and during a release cycle thereof.

17. A high capacity friction clutch type draft gear assembly, as recited in claim 16, wherein said second lubricating insert members are formed from a mixture of a pre-selected lubricating metal and at least 2% graphite.

18. A high capacity friction clutch type draft gear assembly, as recited in claim 11, wherein said outer tapered surface of each of said tapered plates includes a third elongated slot and a third lubricating insert member located within said third elongated slot to prevent detrimental sticking of said friction clutch mechanism after closure of such friction clutch type draft gear assembly and during a release cycle thereof.

19. A high capacity friction clutch type draft gear assembly, as recited in claim 18, wherein said third lubricating insert members are formed from a mixture of a pre-selected lubricating metal and at least 2% graphite.

20. A high capacity friction clutch type draft gear assembly, as recited in claim 11, wherein said first predetermined angle of said inner surface of said pair of inner stationary plate members is about of about 4.5°.

21. A high capacity friction clutch type draft gear assembly, as recited in claim 11 wherein said pair of tapered surfaces of said center wedge is tapered at an angle of about 49.5°.